DOCUMENT RESUME

ED 040 458 CG 005 488

AUTHOR MacDonald, A. P.
TITLE Internal-External Locus of Control and Attitude Toward Disability.
INSTITUTION American Personnel and Guidance Association, Washington, D.C.; West Virginia Univ., Morgantown.
PUB DATE 24 Mar 70
NOTE 21p.; Paper presented at the American Personnel and Guidance Association Convention, New Orleans, Louisiana, March 22-26, 1970

EDRS PRICE EDRS Price MF-$0.25 HC-$1.15
DESCRIPTORS *Adjustment Problems, *Attitudes, *Emotional Problems, Mental Health, Minority Groups, Motivation, Physical Health, *Physically Handicapped, Reactive Behavior, *Social Disadvantagement

ABSTRACT

The relationship between internal-external locus of control and attitude and reaction toward disability is discussed. Apart from examining the relevant research literature, findings are presented which support the hypothesis that those non-disabled who have external control orientations are more threatened by physical disabilities (vis., internal disorder, cosmetic disorders, sensory disorders, and blindness). Evidence in support of the notion that internally controlled persons view emotional disorders as more debilitating than physical disabilities is also presented. Discussion is primarily restricted to three major disability categories: (1) social disadvantagement; (2) physical disability; and (3) emotional disorders. (Author)

Paper presented at the annual meeting of the American Personnel and Guidance Association, New Orleans, March 24, 1970.

ED040458

INTERNAL-EXTERNAL LOCUS OF CONTROL AND ATTITUDE TOWARD DISABILITY[1]

A. P. MacDonald, Jr.[2]

West Virginia University

We live in a society which contains many victims. Vast numbers are disabled and handicapped by reason of social disadvantagement, ethnicity, physical and emotional impairment, and so on. We are all aware of the large number of government, state, and private programs dedicated to the rehabilitation, and in some cases the habilitation, of the disabled.

Apart from remedial programs, there is a considerable amount of research being carried on. One set of research is aimed at the identification of personality characteristics that act to inhibit or facilitate effective adjustment to disability. For example, denial (i.e., refusing to accept the fact that one is disabled) has been isolated and viewed by some investigators as the primary psychological mechanism which interferes with the rehabilitation process (Alger & Rusk, 1955; Asherhost, Hurwitz, & Gruen, 1960; Barker, & Wright, 1952; Barnes, 1952; Fisher, 1958). Conversations with Rehabilitation professionals, as well as exposure to relevant literature, have indicated to the author that another inhibitor of the rehabilitation process is insufficient effort on the part of the disabled. It is a simple truth that one does not make progress unless one tries.

CG005488

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

Some time ago a social psychologist by the name of Fritz Heider spoke of the contingency relationship between can and try (Heider, 1958). A person doesn't try if he does not believe he can. One personality variable which appears to be especially relevant to this issue is Internal-External Locus of Control (Rotter, 1954, 1966). People who believe that they have some control over their reinforcements are called "internals." That is, they consider the source of control over their fates to be at least partly within themselves. In other words, they believe that they can. Those who believe that their lives are controlled by luck, chance, fate, or powerful others, are labeled "externals." When it comes to doing something to control their reinforcements, they do not believe that they can.

Administrations of tests which have been designed to measure this intrapersonal variable have supported the validity of the construct, and many studies have indicated that externals are less prone than internals to try to control their outcomes (Lefcourt, 1966; Rotter, 1966).

If an external control orientation restricts the activities of an otherwise normal individual, how much more debilitating might it be should that persona become disabled? Keeping that question in mind, let us examine relevant research findings, separately for three major disability categories: (a) social disadvantagement, (b) physical disability, and (c) emotional disorders.

Social Disadvantagement

From the assumption that social disadvantagement and minority group membership offer obstacles to advancement, several studies have linked

locus of control to race and socioeconomic status. Negroes have been found to be more external than whites (Lefcourt, & Ladwig, 1965, 1966; Owens, 1969; Zytkoskee, Strickland, & Watson, 1969), and in one study Indians were found to be more external than whites (Graves, 1961). Furthermore, Battle and Rotter (1963) demonstrated that lower-class Negro children were significantly more external than lower-class whites or middle-class Negroes and whites, and Shaw and Uhl (1969) found Negroes to be more external than whites within an upper middle-class sample of elementary school children. The latter investigators found no differences between racial groups within the low socioeconomic level, however.

Apart from racial differences and interactions of race with social class, studies have demonstrated control orientation differences by social class alone. Several investigations have revealed that children from low socioeconomic levels have higher external scores than children from higher social class levels (Battle, & Rotter, 1963; Crandall, Katkovsky, & Crandall, 1965; Shaw, & Uhl, 1969). The author is not aware of any studies showing similar differences among adults, using traditional locus of control measures. However, it takes no more than a glance at the literature to see that many social scientists believe that pervasive feelings of powerlessness are characteristic of the poor (Chilman, 1966; Irelan, 1968).

It indeed appears that minority group membership and low social class level are conducive to the development of a low expectancy for success. In his review of the literature, Lefcourt (1966, p. 212) reached a similar

conclusion, which he stated as follows:

> "In all of the reported ethnic studies, groups whose social position is one of minimal power either by class or race tend to score higher in the external-control direction. Within the racial groupings, class interacts so that the double handicap of lower-class and 'lower-caste' seems to produce persons with the highest expectancy of external control. Perhaps the apathy and what is often described as lower-class lack of motivation to achieve may be explained as a result of the disbelief that effort pays off."

The author would like to suggest that implicit in Lefcourt's conclusion are two hypotheses:

A. Persons who attempt to overcome their difficulties have higher internal control orientations.

B. Success in coping with difficulties will change one in the direction of a more internal control orientation.

Few studies have been done which bear on these hypotheses, especially the second, but what data there are are supportive. In support of the first hypothesis we find that higher internality has been associated with the cessation of smoking after the release of the government report that linked smoking with cancer (James, Woodruff, & Werner, 1965), willingness to engage in remedial behaviors to confront personality problems (Phares, Ritchie, & Davis, 1968), and superior learning of parole related material in a reformatory--when there was no difference between internals and externals

in the amount of non-parole related material learned (Seeman, 1963).

Perhaps more germane to our interests here are the findings of Levens (1968). One hundred AFDC welfare mothers who were members of a welfare client organization were compared with 100 non-members on three measures of powerlessness (powerlessness is often used synomously with external control). In support of the hypothesis that those who join community organizations believe that they have more destiny control, members were significantly lower on all three measures of powerlessness than were non-members. Because of the cross-sectional design used, it is difficult to tell whether the differences accounted for the act of joining or if the differences were reflecting the influence of the organization upon the members. If the latter were the case it would be in support of our second hypothesis. In another study conducted in East Harlem (Gottesfeld, & Dozier, 1966), the Rotter locus of control scale was administered to indiginous people who were undergoing training to be community organizers. Significant support was obtained for the hypotheses that, (a) in the training phase those community organizers who felt less external would learn more, and (b) in the working phase those community organizers who felt less external would show greater initiative.

Data relevant to the second hypothesis are sparse. More study is certainly needed, but what data there are extremely suggestive. In her study of welfare mothers who were members and non-members of a welfare client organization, Levens presented evidence which indicates that affiliation with the organization greatly increased political activism on

the part of the members and reduced their feelings of powerlessness (Levens, 1968). Another study was conducted under the auspices of MEND (Massive Economic Neighborhood Development), a community action program in East Harlem. MEND employs indigenous people who are trained and returned to work in poverty areas as community organizers. Using the Rotter Internal-External Locus of Control Scale, significant support was obtained for the hypothesis that community organizers who had been trained and had been working would feel less external than those who were still in training (Gottesfeld, & Dozier, 1966).

In conclusion, it appears that those socially disadvantaged who do not try to better their circumstances, behave as they do largely because of low expectancy for success. Furthermore, low expectancy seems to be characteristic of this group. There is some evidence which indicates that expectancy levels can be raised by providing success experiences in community action and other types of programs. Research aimed at identifying the kinds of programs or techniques that are most efficient for raising expenctancy levels is very much needed.

Physical Disability

The author and his associate (Mrs. Hall) propose that, in contrast to internals, externally oriented persons will find physical disabilities more threatening. The hypothesis is based upon the notion that externals may fear that such disabilities might be viewed negatively by the social agents upon whom they depend. The hypothesis has been tested on a sample of 479 (211 males & 268 female) non-disabled undergraduate students at

West Virginia University. Subjects rated (on 10-point scales) how debilitating they believed a series of 15 disabilities would be to them personally (i.e., in their feelings about themselves) and socially (i.e., in the community; in their relationships with people generally). Previous research (MacDonald & Hall, 1969) has indicated that the 15 disabilities combine to produce measures of five disability types:

A. Internal disorders: Heart condition, back condition, and diabetes.

B. Sensory disorders: Deafness and speech loss.

C. Cosmetic disorders: Scarred face, being extremely overweight, hunched back, amputated leg, amputated arm, and amputated hand.

D. Blindness.

E. Emotional disorders: Having irrational fears, being extremely depressed, and being withdrawn. Data from this study pertaining to emotional disorders will be discussed separately within the section entitled: Emotional Disorders.

A 2 X 2 analysis of variance design was used to test the hypothesis that externals would rate the disabilities as more debilitating to themselves personally and socially. The design included sex (male & female) and locus of control (internal & external) as factors, and the disability ratings as dependent variables. Internals were defined as those subjects who scored in the lower 27 percent of the distribution of locus of control scores (high scores on the Rotter Internal-External Locus of Control Scale are associated with externality). Externals were those whose scores fell in the upper 27 percent. This procedure yielded 129 internals (58 males & 71 females) and 129 externals (58 males & 71 females). [3]

Of the eight comparisons (i.e., one for personal and one for social for each of the four disability types) all were in the predicted direction (Tables 1 & 2). Externals rated the disabilities as more debilitating than did internals. Six of the eight differences between the means were statistically significant: internal disorders (personal: $p < .01$, social: $p < .01$), sensory disorders (personal: $p < .001$, social: $p < .01$), and cosmetic disorders (personal: $p < .001$, social: p .01). The data pertaining to blindness failed to reach the .05 level of significance. However, the marginal level obtained for the social dimension ($p < .08$) coupled with the consistency in these results may well lead to the interpretation that the means are reliably different. The data therefore suggest that although externals do not differ from internals in how blindness would affect them personally (in their feelings about themselves), externals find blindness to be more threatening to themselves socially.

Only one significant Sex X Locus of Control interaction was found: internal disorders as they would affect subjects socially (p .02). Examination of the cell means revealed that the significant main effect found between internals and externals was primarily due to the high ratings made by external males. That is, male externals rated internal disorders significantly higher than did external females ($\underline{t} = 2.48$, $\underline{df} = 121$, $p < .02$, two-tailed test). External females were not found to differ significantly from male or female internals.

It will be recalled that the internal disorder cluster is made up of the ratings of three disabilities: heart condition, back condition, and diabetes. In an effort to gain insight into the meaning of the

above interaction, we performed the 2 X 2 analysis of variance separately for each of the three disabilities. The notion being that external males might have been overly sensitive or external females less sensitive to one of the disabilities, rather than to all three that make up the cluster. The analyses revealed that the same pattern that held for the internal disorder cluster held for each of the three disabilities that make it up. That is, a significant interaction was found for each disability, and it was the high ratings made by external males that accounted for the locus of control main effects. We are frankly at a loss to explain the meaning of the interaction. Clarification will have to come from future research.

Overall the data have offered considerable support for the hypothesis that externals view physical disabilities as more debilitating to themselves personally and socially than do internals.

Emotional Disorders

MacDonald and Hall (1969) hypothesized that although physical disability might be more threatening to those having external control orientations, emotional disorders will be more threatening to internals. The notion is based upon the supposition that emotional disorders imply a loss of inner control. If so, they should be more threatening to internals who believe that they have such control to lose.

Some support for this hypothesis was obtained from a sample of 47 college students (MacDonald & Hall, 1969). A low but statistically significant relationship was found between locus of control and ratings of emotional disorders ($r = -.30$, $df = 45$, $p < .05$).

The hypothesis was again tested on the sample of 479 students described above (see Physical Disability). No reliable differences were found between internals and externals (Table 1 & 2). However, another important prediction, made from the theoretical rationale presented here, was tested. It was predicted that a comparison of internals' and externals' ratings of emotional disorders relative to physical disabilities would reveal that emotional disorders were rated as relatively more debilitating by internals than by externals. To test this notion, each subject's average (mean) rating for the three emotional disorders was subtracted from the average rating he assigned to the 11 physical disabilities combined. [4] A positive difference would mean that the S, on the average, had rated emotional disorders as less severe than physical disabilities. A negative difference would indicate that emotional disorders were rated as more severe. It was predicted that internals and externals would differ significantly in these difference scores. More specifically, that internals would see emotional disorders as more debilitating than externals, relative to physical disabilities.

The hypothesis was supported in both tests (Table 3). Internals relative to externals saw emotional disorders as more debilitating than physical disabilities, (a) to their feelings about themselves ($p < .05$), and (b) in their social relationships ($p < .05$).

Discussion

Though some support was obtained for the hypotheses concerning emotional disorders, it was more consistent and pronounced for those

pertaining to physical disabilities. One of two conditions might explain the failure to obtain stronger support within the analyses of emotional disorders: (a) the differences between internals and externals are in fact minor, or (b) the three emotional disorders used in this study are not representative of emotional disorders per se. If the former is true, the findings presented here, though contributing to the construct validity of "locus of control," are probably of little practical value. If the latter is true, an important contribution might be made by doing a similar study which would include a greater number and variety of emotional disorders within its rating scale.

Generalization of findings taken from non-disabled samples to the disabled must be done with extreme caution. Even when such care is taken, generalization must be treated as highly speculative at best. However, it seems reasonable to the author that attitudes of the non-disabled toward disabilities may in part determine their reactions to later becoming disabled. If so, these data suggest that, at least for physical disabilities, persons' control orientations might affect their adjustment to a disabling condition. Though no definite conclusions can be drawn from the data presented here, they suggest that those who are doing research and/or therapy with the disabled might find it worthwhile to include a locus of control measure within their group of psychometric instruments.

In conclusion, it should be highlighted that locus of control is not a motivational variable, but rather an expectancy variable. Findings that persons do not try to improve their conditions because of negative expectancies do not indicate that those persons do not want to improve

their conditions. We know that, more than ever, a large number of the victims in our society are motivated to improve their living conditions, but they have low expectancies for success--often realistically. Motivation coupled with positive expectancy equals optimism; motivation coupled with negative expectancy equals despiration. When viewed from this perspective it is not difficult to understand why certain disadvantaged minority groups have turned to violence.

Some of the evidence presented here suggests that expectancy levels can be raised. It would seem that attempting to raise expectancy levels would be a worthwhile endeavor for both the researcher and the practitioner. Perhaps, if we are successful in raising the expectancy levels of the disabled we may experience the happy by-product of raising our own.

References

Alger, B., & Rusk, H. The rejection of help by some disabled people. Archives of Physical and Medical Rehabilitation, 1955, 36, 279-281.

Ashenhorst, E., Hurwitz, L., & Gruen, A. Motivational and structural factors in the denial of hemiplegia. Archives of Neurology, 1960, 3, 315-317.

Barker, R. G., & Wright, B. The social psychology of adjustment to physical disability. Washington, D. C.: Department of Health, Education, and Welfare, Office of Vocational Rehabilitation, 1952, 18-32.

Barnes, R. H. Psychological problems in physical rehabilitation: A review. American Journal of Medical Sciences, 1952, 223, 106-112.

Battle, E. S., & Rotter, J. B. Children's feelings of personal control as related to social class and ethnic group. Journal of Personality 31, 1963, 482-490.

Chilman, C. S. Growing up poor. U. S. Department of Health, Education, and Welfare, Welfare Administration Publication No. 13, May, 1966.

Crandall, V. C., Katkovsky, W., & Crandall, V. J. Children's beliefs in their own control of reinforcements in intellectual-academic achievement situations. Child Development, 1965, 36, 91-109.

Fisher, S. Mechanism of denial in physical disabilities. Archives of Neurology and Psychiatry, 1958, 80, 784.

Gottesfeld, H., & Dozier, G. Changes in feelings of powerlessness in a community action program. Psychological Reports, 1966, 19, 978.

Graves, T. D. Time perspective and the deferred gratification pattern in a tri-ethnic community. Research Report No. 5, Tri-Ethnic Research Project. University of Colorado, Institute of Behavioral Science, 1961.

Heider, F. The psychology of interpersonal relations. New York: John Wiley and Sons, Inc., 1958.

Irelan, L. M. Low-income life styles. U. S. Department of Health, Education, and Welfare, Welfare Administration, Division of Research, Publication No. 14, 1968 (U. S. Government Printing Office: 1968 OF-285-640).

James, W. H., Woodruff, A. B., & Werner, W. Effect of internal and external control upon changes in smoking behavior. Journal of Consulting Psychology, 1965, 29, 127-129.

Lefcourt, H. M. Internal versus external control of reinforcement: A review. Psychological Bulletin, 1966, 65, 206-220.

Lefcourt, H. M., & Ladwig, G. W. The American Negro: A problem in expectancies. Journal of Personality and Social Psychology, 1965, 1, 377-380.

Lefcourt, H. M., & Ladwig, G. W. Alienation in Negro and white reformatory inmates. Journal of Social Psychology, 1966, 68, 153-157.

Levens, H. Organizational affiliation and powerlessness: A case study of the welfare poor. Social Problems, 1968, 16, 18-32.

MacDonald, A. P., Jr., & Hall, J. Perception of disability by the non-disabled. Consulting and Clinical Psychology, 1969, in press.

Owens, D. A. Disability-minority and social learning. Unpublished Master's thesis. West Virginia University, 1969.

Phares, E. J., Ritchie, D. E., & Davis, W. L. Internal-External control and reaction to threat. Journal of Personality and Social Psychology, 1968, 10, 402-405.

Rotter, J. B. Social learning and clinical psychology. New York:: Prentice-Hall, 1954.

Rotter, J. B. Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs, 1966, 80(1), (1 Whole Nr. 609).

Seeman, M. Alienation and social learning in a reformatory. American Journal of Sociology, 1963, 69, 270-284.

Shaw, R. L., & Uhl, N. P. Relationship between locus of control scores and reading achievement of black and white second-grade children from two socioeconomic levels. Paper presented at 15th Annual Meeting of Southeastern Psychological Association, New Orleans, March 1969.

Zytkoskee, A., Strickland, B. R., & Watson, J. Delay of gratification and internal versus external control among adolescents of low socio-economic status. Paper presented at the Southeastern Psychological Association Convention, New Orleans, March 1969.

Footnotes

[1] The author's research contained within this paper was supported in part by West Virginia University Regional Rehabilitation Research and Training Center, through the Social and Rehabilitation Service, HEW.

[2] Requests for copies of this paper should be addressed to: A. P. MacDonald, Jr., Rehabilitation Research and Training Center, 806 Forestry Tower, West Virginia University, Morgantown, West Virginia, 26506.

[3] In some cases the numbers are slightly lower due to the fact that cluster scores were not computed when responses were not made for all the disabilities within the cluster.

[4] That is, all physical disabilities with the exception of blindness.

Table 1

Internally and Externally Oreinted Subjects' Ratings of Disabilities as They Would Affect Themselves in Their Feelings About Themselves

	I N T E R N A L S		E X T E R N A L S		F
	N	Mean	N	Mean	
Internal disorders:					
Males	53	11.32	56	13.73	
					n.s.
Females	67	11.21	67	12.42	
Total	120	11.26	123	13.02	6.473**
Sensory disorders:					
Males	53	13.59	56	14.79	
					n.s.
Females	67	13.45	67	15.52	
Total	120	13.51	123	15.19	10.622***
Cosmetic disorders:					
Males	53	32.96	56	36.68	
					4.117*
Females	67	34.81	67	40.60	
Total	120	33.99	123	38.81	12.272***

(Table continued on next page)

(Table 1 Continued)

	INTERNALS		EXTERNALS		F
	N	Mean	N	Mean	
Emotional disorders:					
Males	53	15.83	56	15.89	
					n.s.
Females	67	16.69	67	17.12	
Total	120	16.39	123	16.56	n.s.
Blindness:					
Males	53	7.47	55	7.16	
					9.077**
Females	67	6.13	67	6.58	
Total	120	6.72	122	6.84	n.s.

Note.--Data were analyzed in a 2 X 2 analysis of variance design.

High means are associated with greater ratings of the seriousness of the disabilities.

No significant Sex X Locus of Control interactions were found.

* $p \leq .05$

** $p \leq .01$

*** $p \leq .001$

Table 2

Internally and Externally Oriented Subjects' Ratings of Disabilities as They Would Affect Themselves in Their Social Relationships

	INTERNALS		EXTERNALS		F
	N	Mean	N	Mean	
Internal disorders:					
Males	53	8.08	56	11.77	
					n.s.
Females	67	8.75	67	9.06	
Total	120	8.45	123	10.29	6.224**[a]
Sensory disorders:					
Males	53	13.59	56	14.95	
					n.s.
Females	67	13.08	67	15.10	
Total	120	13.30	123	15.03	9.950**
Cosmetic disorders:					
Males	53	33.08	56	36.77	
					n.s.
Females	67	35.19	67	39.45	
Total	120	34.26	123	38.23	6.092**

(Table continued on next page)

(Table 2 Continued)

	INTERNALS		EXTERNALS		
	N	Mean	N	Mean	F
Emotional disorders:					
Males	53	17.11	56	17.11	
					n.s.
Females	67	18.99	67	18.40	
Total	120	18.16	123	17.81	n.s.
Blindness:					
Males	53	7.87	55	8.13	
					10.924***
Females	67	6.58	67	7.36	
Total	120	7.15	122	7.71	3.101 ($p < .08$ n.s.)

Note.--Data were analyzed in a 2 X 2 analysis of variance design. High means are associated with greater ratings of the seriousness of the disabilities.

A significant Sex X Locus of Control interaction was found for internal disorders only ($F = 5.257$, $df = 1/239$, $p = .02$). Inspection of the appropriate cell means indicates that the difference between I's and E's is primarily due to the high ratings made by external males. External males rated internal disorders significantly higher than external females ($t = 2.48$, $df = 121$, $p < .02$, two-tailed test). External females were not found to differ significantly from internal males or females.

** p .01

Table 3

Differences Between Internals and Externals in Their Average Ratings of Emotional Disorders as Compared to Their Average Ratings of Physical Disabilities

	INTERNALS		EXTERNALS	
	N	Mean [a]	N	Mean [a]
Self-Personal	122	-.11	121	.59
Self-Social	129	-.93	129	-.19

	Self-Personal			Self-Social		
Source	df	MS	F	df	MS	F
Sex (A)	1	1.80	----	1	12.40	1.94
Locus of Control (B)	1	29.38	5.30*	1	35.64	5.58*
A X B	1	.20	----	1	.51	----
Error (within)	239	5.54		254	6.39	

[a] Negative mean difference scores indicate that emotional disorders were rated as more debilitating than physical disabilities. Positive means indicate that physical disabilities were considered to be more debilitating.

* $p < .05$